

## PART I



# Core Advanced Excel Concepts

In this part, I'll review the core concepts that make up the essentials of advanced Excel.

Chapter 1 explains what is meant by advanced Excel development, and how this book differs from many others. For instance, several books place significant emphasis on Visual Basic for Applications code, believing macros to be the most important feature of Excel development. This chapter will challenge that notion and present advanced concepts as a product of many different Excel features, including code. Additionally, I discuss the most important required skill—creativity.

Chapter 2 provides a brief Visual Basic for Applications refresher. I'll discuss how best to set up the coding environment to make it conducive to headache-free coding. I'll also challenge conventional coding conventions and propose alternatives that will prove more effective.

Chapter 3 introduces the formula concepts that will be used in this book. The chapter starts with tips that will make your experience developing advanced formulas run more smoothly. I'll then show you how to perform advanced calculations by simply using range operators. You'll develop advanced alternatives to the IF function that will prove more powerful in practice and more readable later on. In addition, you'll investigate the full extent of Excel's Boolean logic features.

Chapter 4 continues the discussion of formulas by demonstrating how they can be used with advanced applications. I take you through several examples applying these formula concepts and demonstrate how they can be understood with a little bit of algebra. The chapter concludes by introducing the notion of reusable components, which are spreadsheet mechanics that can be easily reused for other projects.

Chapter 5 shows how advanced capabilities can be built into spreadsheets by using the humble form control. In this chapter, I argue against using ActiveX and UserForms. Instead, you'll rely on the flexibility of form controls combined with the speed and prowess of formulas. Chapter 5 concludes with several practical reusable components that you can start using in your own work right away.